

ABSTRACT OF THE DISCLOSURE

The invention is to provide a water based ink for ball-point pen capable of writing also on a non-permeable surface and ball-point pen using a same ink. In the invention, there are provided a solvent formed by a water and an alcoholic solvent having a vapor pressure at 20°C of 0.5 kPa or higher, a pigment constituting a coloring material, a water-soluble resin constituting a writing fixing agent, and a surfactant of phosphoric acid ester type wherein an ink viscosity at 20°C is within a range of 5 to 30 mPa·s, and ball-point pen using the same ink.